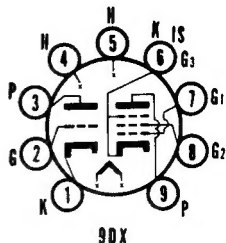




# SYLVANIA TYPE 6BA8 6BA8A 8BA8A



TRIODE PENTODE

## MECHANICAL DATA

Bulb.....	T-6 1/2, Outline 6-3
Base.....	E9-1, Miniature Button, 9-Pin
Basing.....	9DX
Mounting Position.....	Any

## ELECTRICAL DATA

### HEATER CHARACTERISTICS

	6BA8	6BA8A	8BA8A
Heater Voltage.....	6.3	6.3	8.4 Volts
Heater Current.....	600	600	450 Ma
Heater Warm-up Time.....	11	11	11 Seconds
Maximum Heater-Cathode Voltage			
D C and Peak.....			200 Volts
D C, Heater Positive with Respect to Cathode.....			100 Volts

### DIRECT INTERELECTRODE CAPACITANCES

Triode	Shielded <sup>1</sup>	Unshielded
Grid to Plate.....	2.2	2.2 $\mu$ f
Input.....	2.7	2.5 $\mu$ f
Output.....	1.9	0.4 $\mu$ f
Pentode		
Grid to Plate.....	.030	0.036 $\mu$ f Max
Input.....	10.0	10.0 $\mu$ f
Output.....	4.5	3.6 $\mu$ f
Coupling		
Pentode Grid No. 1 to Triode Plate.....	.003	.006 $\mu$ f Max
Pentode Plate to Triode Grid.....	.006	.016 $\mu$ f Max
Pentode Plate to Triode Plate.....	.023	.150 $\mu$ f Max

### MAXIMUM RATINGS (Design Center Values)

	Triode	Pentode
Plate Voltage.....	300	300 Volts
Grid No. 2 Supply Voltage.....		300 Volts
Grid No. 2 Voltage.....	See Rating Chart for Type 6AM8	
Plate Dissipation.....	2.0	3.25 Watts
Grid No. 2 Dissipation.....		1.0 Watt
Negative Grid No. 1 Voltage.....		50 Volts
Positive Grid No. 1 Voltage.....		0 Volts
Grid No. 1 Circuit Resistance		
Fixed Bias.....	0.5	0.25 Megohm
Self Bias.....	1.0	1.0 Megohm

### CHARACTERISTICS AND TYPICAL OPERATION

Class A <sub>1</sub> Amplifier	Triode	Pentode
Plate Voltage.....	200	200 Volts
Grid No. 2 Voltage.....		150 Volts
Grid No. 1 Voltage.....	-8	0 Volts
Cathode Bias Resistor.....		180 Ohms
Amplification Factor.....	18	
Plate Resistance (approx.).....	6700	400,000 Ohms
Transconductance.....	2700	9000 $\mu$ mhos
Plate Current.....	8.0	13 Ma
Grid No. 2 Current.....		3.5 Ma
Grid No. 1 Voltage for $I_b = 10 \mu$ a (approx.).....	-16	-10 Volts

### PLATE KNEE CHARACTERISTICS (6BA8A, 8BA8A)

$E_b = 65V$ ,  $E_{c2} = 150V$ ,  $E_{c1} = 0V$   
 $I_b = 42 Ma$ ,  $I_{c2} = 12.5 Ma$

### NOTES:

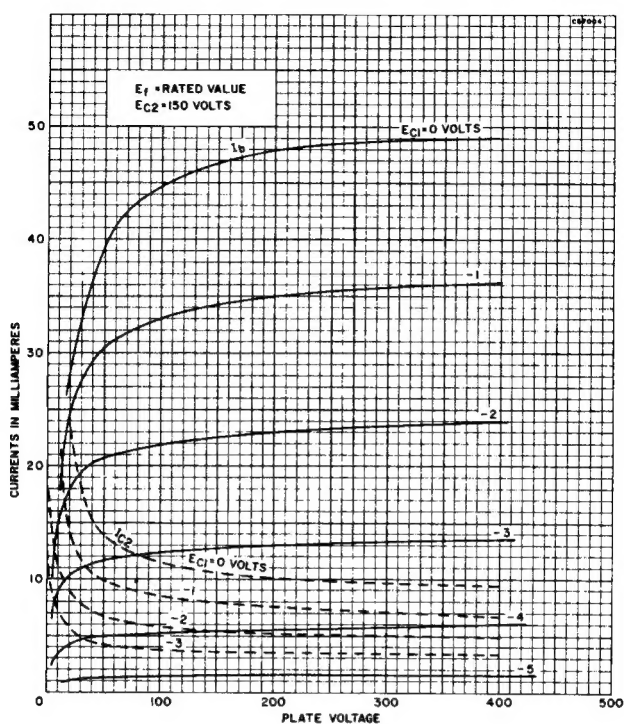
1. Shield No. 315 tied to cathode base pin of section under test.
2. The pentode section curve applies to Types 6BA8A and 8BA8A, only.

## APPLICATION

The Sylvania Types 6BA8, 6BA8A and 8BA8A are intended for service in television receivers employing a series heater string. The triode may be used as a sync clipper or sync separator. The pentode section is designed primarily to serve as a video amplifier. For information on specially controlled heaters for series string operation refer to the SERIES STRING section of the Appendix.

# 6BA8, 6BA8A, 8BA8A (Cont'd)

## AVERAGE PLATE CHARACTERISTICS PENTODE SECTION



## AVERAGE PLATE CHARACTERISTICS TRIODE SECTION

